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C I R C U L A R.

ALL persons who feel a deep interest in the permanent establishment and successful prosecution of the manufacture of iron in this country, must have observed with solicitude the great, and, in the aggregate, increasing importation of foreign iron.

In the present disposition of our national legislature, there is no probability that any change, of a directly protective character, can be obtained in our revenue system.

The question then naturally arises, can any probable legislation be suggested, not directly protective, which will enable us, in any considerable degree, to check the great influx from abroad?

With reference to this question, I have analyzed the treasury returns of the importations of each description of iron, for the last thirty years, to ascertain the relative increase or decrease in the amount of each imported; and to show, for different periods, what proportion each contributed to the total.

Among the statements appended to the "Report on the Finances, for the year ending June 30th, 1851," is one marked "S. No. 1," which exhibits "the quantity and value of bar iron, pig iron, and old and scrap iron imported annually, from 1821 to 1851, inclusive."

The importations of iron are officially divided into four classes, as follows:—

Iron manufactured by rolling.

“ “ otherwise.

Pig iron.

Old and scrap iron.

The *first class*—"iron manufactured by rolling"—includes rails, merchant and refined bars, ~~rods, hoops, bands, sheets, and boiler plates;~~ in short, all kinds of rolled iron.

Not smaller than $\frac{1}{8}$ " or $\square$

The *second class*—"iron manufactured otherwise"—consists chiefly of hammered bars, from Norway, Sweden, and Russia. These are used only for conversion into steel; except a small portion, which is made into shovels, card-wire, and a few other articles of extra quality.

The *third class*—"pig iron"—consists exclusively of Scotch pigs, used only by foundries, for making castings.

The *fourth class*—"old and scrap iron"—comprises all sorts of worn-out and broken articles of iron, requiring to be remanufactured in the rolling-mill, before going into the market for general consumption.

THE QUANTITY, VALUE, AND PROPORTION OF EACH KIND OF

Year ending Sept. 30.	BAR MANUFACTURED BY ROLLING.					BAR MANUFACTURED OTHERWISE.				
	Quantity.		Appraised value.			Quantity.		Appraised value.		
	Tons.	¢	Dollars.	¢	Per ton.	Tons.	¢	Dollars.	¢	Per ton.
1825	4,254	14.	224,497	12.	52.82	24,650	83.	1,562,146	86.	63.37
1826	4,437	15.	223,259	12.	30.31	23,376	79.	1,590,350	84.	68.03
1827	8,103	25.	347,792	20.	42.92	22,010	70.	1,323,749	77.	60.14
1828	10,295	21.	441,000	16.	42.84	33,392	70.	2,141,178	80.	64.12
1829	3,320	10.	119,326	6.	35.94	29,482	87.	1,884,049	93.	63.91
1830	6,949	18.	226,336	11.	32.57	30,693	79.	1,730,375	88.	56.37
1831	17,246	36.	544,664	27.	31.58	23,318	49.	1,260,166	65.	54.04
1832	21,387	30.	701,549	25.	32.79	38,150	55.	1,929,493	67.	50.57
1833	28,028	38.	1,002,750	32.	35.78	36,124	48.	1,837,473	60.	50.87
1834	28,896	40.	1,187,236	37.	41.08	31,785	43.	1,742,883	54.	54.83
1835	28,310	39.	1,050,152	35.	37.09	31,529	43.	1,641,359	55.	52.05
1836	46,676	52.	2,131,828	50.	45.67	32,938	37.	1,891,214	43.	57.42
1837	47,840	51.	2,573,367	51.	53.79	31,326	33.	2,017,346	40.	64.40
1838	36,174	51.	1,825,121	55.	50.45	21,320	30.	1,166,196	35.	54.70
1839	60,285	55.	3,181,180	57.8	52.77	35,558	33.	2,054,094	37.	57.76
1840	32,829	49.	1,707,649	48.4	52.02	28,819	42.	1,689,831	48.	58.63
1841	63,056	60.	2,172,278	54.1	34.45	29,605	28.	1,614,619	40.1	54.54
1842	61,599	62.	2,053,453	60.	33.33	19,512	19.	1,041,410	31.	53.37
1843*	15,758	60.	511,282	57.4	32.44	6,254	24.	327,550	36.8	52.37
1844	37,891	57.	1,065,582	57.	28.10	11,822	18.	583,065	31.	49.32
1845	51,189	50.	1,691,748	53.	33.05	18,177	18.	872,157	27.	47.98
1846	24,109	33.	1,127,418	40.	46.76	21,328	30.	1,165,429	41.	54.64
1847	40,184	47.	2,129,489	60.	53.00	15,411	18.	854,708	23.	55.46
1848	81,589	51.	3,679,598	66.	45.10	20,156	13.	975,214	17.	48.38
1849	173,457	58.	6,060,068	75.	34.94	10,598	4.	525,770	6.	49.61
1850	247,951	71.	7,397,166	80.	29.83	14,707	4.	744,735	8.	50.63
1851	254,302	73.	7,324,283	80.	28.80	20,199	6.	900,026	10.	44.55

* Nine months to June 30. From and after this date the fiscal year ends June 30, instead of September 30, as before.

From the above-cited statement I have compiled the subjoined table, converting into tons the weights given officially in cwts., adding, after each column of quantities, a column showing the proportion by weight that each description contributed to the total weight imported; and, after each column of values, one showing the proportionate value of each description, and another showing its appraised value per ton.

I have added the last two columns, to show the total quantity and value of the import in each year respectively.

IRON IMPORTED ANNUALLY, FROM 1825 TO 1851 INCLUSIVE.

PIG IRON.					OLD AND SCRAP.					TOTAL.		Year ending Sept. 30.
Quantity.		Appraised value.			Quantity.		Appraised value.			Quantity.	Value.	
Tons.	¢	Dollars.	¢	Per ton.	Tons.	¢	Dollars.	¢	Per ton.	Tons.	Dollar .	
815	3.	36,513	2.	44.78						29,716	1,823,156	1825
1,705	6.	67,004	4.	39.31						29,517	1,880,613	1826
1,756	5.	46,881	3.	26.70						31,868	1,718,422	1827
3,497	9.	93,025	4.	26.60						47,184	2,675,203	1828
1,139	3.	28,811	1.	25.30						33,941	2,032,186	1829
1,125	3.	25,644	1.	22.80						38,767	1,982,355	1830
6,948	15.	160,681	8.	23.13						47,512	1,965,511	1831
10,151	15.	222,303	8.	21.90						69,689	2,853,345	1832
9,330	13.	217,668	7.	23.33	998	1.	24,035	1.	24.08	74,781	3,081,926	1833
11,113	15.	270,325	8.	24.32	1,637	2.	33,243	1.	20.30	73,432	3,233,687	1834
12,296	17.	289,779	9.6	23.57	640	1.	11,609	0.4	18.13	72,776	2,992,899	1835
8,541	10.	272,978	6.	31.96	1,248	1.	28,224	1.	22.62	89,402	4,324,244	1836
14,129	15.	422,929	8.7	29.93	767	1.	18,391	0.3	23.99	94,060	5,032,033	1837
12,192	18.	319,099	9.7	26.17	437	1.	7,567	0.3	17.32	70,122	3,317,983	1838
12,508	11.	285,300	5.	22.81	589	1.	10,161	0.2	17.25	108,939	5,530,735	1839
5,516	8.	114,562	3.2	20.77	707	1.	15,749	0.4	22.27	67,871	3,527,791	1840
12,268	11.	223,228	5.6	18.20	783	1.	10,537	0.2	13.45	105,712	4,020,662	1841
18,944	18.	295,284	8.7	15.59	686	1.	8,207	0.3	11.97	100,742	3,398,354	1842
3,873	15.	48,251	5.4	12.46	158	1.	2,743	0.4	17.38	26,043	889,826	1843*
14,944	22.	200,522	10.	13.42	2,133	3.	43,396	2.	20.34	66,791	1,872,565	1844
27,510	27.	506,291	17.	18.40	5,847	5.	119,740	3.	20.48	102,723	3,189,936	1845
24,188	34.	489,573	17.	20.24	2,362	3.	56,534	2.	23.93	71,987	2,838,954	1846
27,856	32.	554,486	16.	19.91	1,894	3.	40,669	1.	21.49	85,344	3,579,382	1847
51,632	32.	815,415	14.	15.79	6,630	4.	140,037	3.	21.12	160,008	5,610,264	1848
105,632	35.	1,405,613	17.	13.37	9,450	3.	144,424	2.	15.28	299,138	8,135,875	1849
74,874	22.	950,660	10.	12.70	10,104	3.	161,981	2.	16.03	347,637	9,254,542	1850
67,250	19.	787,524	9.	11.71	8,394	2.	112,029	1.	13.35	350,144	9,123,862	1851

* Nine months to June 30. From and after this date the fiscal year ends June 30, instead of September 30, as before.

Rolled Iron.—It appears, by an inspection of the table, that the importation of rolled iron for twelve years, from 1836 to 1847, inclusive, although subject to great fluctuations, did not increase.

The first year, 1836, the importation was	.	Tons	46,676
“ last “ 1847,	“ “	“	40,184
“ largest, 1841,	“ “	“	63,056

Rejecting the returns for 1843, being for 9 months only—

The smallest year, 1846, was	.	Tons	24,109
Average of the whole 12 years	.	“	43,132

Since 1847, however, the importation has regularly and rapidly increased, as follows:—

Year.	Quantity. Tons.	Increase p'r cent.	Appraised Value. Decrease p'r cent.
1847	40,184		
1848	81,589	103	15
1849	173,457	113	23
1850	247,951	43	15
1851	254,302	3	3

I propose to compare this state of facts with that shown in the imports of other descriptions of iron.

<i>Hammered Iron.</i> —Average annual importation for 16	Tons.
years, 1832 to 1847, inclusive	25,604
Highest year, 1832	38,150
Lowest “ 1844	11,822
Average of years, 1832, '33, '34, '35, 4 years	34,397
“ “ 1836, '37, '38, — 3 “	28,528
“ “ 1839, '40, '41, — 3 “	31,328
“ “ 1842, '43, '44, — 3 “	12,529
“ “ 1845, '46, '47, — 3 “	18,306
“ “ 1848, '49, '50, '51, 4 “	16,415

It appears that within the period under consideration, the importation of hammered bar iron reached its maximum in 1832; that it continued without much change for eight years, until 1839, and that after that year it rapidly declined until 1844, when it

was only about one-third of the amount of 1839. This decline was caused chiefly by the discovery, in 1842, of the mode now practised of making good cut nails from puddled iron. Before that time, they were all made of Swedes' iron and charcoal blooms. A comparison of the average annual import for the years 1845, '46, '47, with that of the last four years for which we have the returns, ending with 1851, shows a further average decrease of 10 per cent., notwithstanding the fact that the cost decreased nine per cent. during the latter period.

<i>Pig Iron.</i> —Average annual importation for 12 years,						Tons.
1836 to 1847, inclusive	.	.	.	.	.	15,205
Highest year, 1847	.	.	.	.	.	27,856
Lowest " 1840	.	.	.	.	.	5,516

The importation from 1836 to the close of 1844, the first nine years of the above period, did not vary much, averaging 11,435 tons. In the next three years, it more than doubled, averaging 26,518 tons, and continued as follows:—

Year.	Tons.	Quantity.		Appraised Value.	
		Increase p'r cent.	Decrease p'r cent.	Decrease p'r cent.	
1847	27,856				
1848	51,632	85			18
1849	105,632	105			16
1850	74,874		29		5
1851	67,249		10		8

From this, it appears that the importation of Scotch pig iron reached its maximum in 1849, since which time it has regularly decreased, notwithstanding the decrease in its price.

The importation of 1851, compared with that of 1849, shows a decrease of 36 per cent. The decrease in the appraised value during the same time, was 12 per cent. This shows, conclusively, the ability of our anthracite furnaces to hold the American market against Scotch iron. The competition between them during the years 1849, '50, '51, was, unquestionably, very sharp; probably neither party made a dollar during that time. But the steady diminution of the imports during the same period, notwithstanding the fact that the foreign iron was offered at a lower price each succeeding year, shows the inability of the foreign manufacturers

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under the present tariff

to retain their position. At this time (September, 1855), American anthracite pig iron, No. 1, is sold from \$6 to \$9 below the price of Scotch iron of the same quality, which shows that we still command the market.

<i>Old and Scrap Iron.</i> —Average annual importation for						Tons.
12 years, 1836 to 1847, inclusive	.	.	.	.	.	1,467
Highest year, 1845	.	.	.	.	.	5,847
Lowest “ 1838	.	.	.	.	.	437
Since 1847, the imports average	.	.	.	.	.	8,645

The importation fluctuates very much, but the whole amount is so trifling that it is not worthy of consideration.

From the foregoing statements, it is evident that while our importations of hammered iron and pig iron have been decreasing, and our import of scrap has remained insignificant, but with a strong tendency to increase, our import of rolled iron has increased from 24,109 tons (33 per cent. of the total import in 1846), to 254,302 tons (73 per cent.) in 1851,* or nearly eleven-fold in five years; making up all the deficiencies in the other descriptions, and producing an enormous increase in the total imports.

English refined iron, which, after rails, constitutes much the largest item in the imports of rolled iron, is chiefly made from a mixture of scraps and puddled iron. It appears from the “Finance Report for the year ending June 30th, 1853,” accompanying paper marked *L*, that the only countries which professedly admit scrap iron duty free, are Great Britain and the Netherlands. As the latter has no cheap fuel, it is therefore virtually Great Britain alone. She therefore has this, in addition to her other advantages over us, in this branch of manufacture. It is equal to the amount of our duty of 30 per cent., which is as follows:—

* It is undoubtedly still larger at this time, 1855.

Year.	Appraised Value of Scraps per Ton.	Duty 30 per cent. ad val.
1846	\$23.93	\$7.18
1847	21.49	6.45
1848	21.12	6.34
1849	15.28	4.58
1850	16.03	4.81
1851	13.35	4.00

Average value, \$18.53.

Average duty, \$5.56.

The accumulation of scrap iron is very great in all tropical countries, where the climate forbids its manufacture; in all barbarous or half-civilized countries, where the art of making iron has not yet been introduced; and at all naval or maritime rendezvous. It is gathered up from the whole earth, by English ships, and carried home as ballast.

Cuba, lying by our very side, contains 351 miles of railroad in operation,* beside a vast number of sugar mills and other machines. These wear out a very large amount of iron every year, which is, from necessity, sold to England, even though it be replaced, as is often the case, by new machinery from the United States.

If the duty on "*old and scrap iron*" were entirely repealed, the beneficial effect would be twofold. We would import from England scraps instead of finished bars. The effect of this would be to enhance the price of scraps, and, consequently, the price of bars there; and to diminish the cost of production here.

It may be objected that this would injure the makers of pig iron here. It could not do this, for three reasons: First, they have not now the business in question, because the manufacture of bar iron for the supply of the Atlantic cities does not exist as a national industry. There are not half a dozen rolling mills engaged in it, while there are twenty in the city of Pittsburg alone. Any legislation, therefore, which would enable others to engage in it with profit, would be the occasion of a clear gain. Second, mills to be employed in this branch of business, would be obliged, if they should attempt to make anything better than the commonest article, to use with scrap a certain portion of pig iron, to

* *De Bow's Review*, September, 1854.

insure uniformity in the quality of the product. If, on the other hand, they should confine themselves to an inferior article, this would take the place of "common English" iron, now imported. Third, the direct tendency of the change suggested would be to enhance the price of all kinds of iron in England, by cutting off the supply of one of the chief materials of its manufacture. It would oblige the Staffordshire mills to increase their consumption of Scotch pig; of which they are already, to some extent, reluctant and unsteady consumers. It would also tend to depreciate the quality of their product.

In addition to these considerations, it may be observed that a rolling mill requires a large amount of iron to construct it, and annually thereafter, to keep it in repair.

One of the greatest difficulties under which the manufacturers in Staffordshire now labor, is occasioned by a scarcity of ore. Recent advices assign as the cause of the numerous failures which have occurred among them, within the past year, the fact that the difference between the price of pig iron and that of rolled iron was not sufficient to defray the cost of conversion.* Now, if we

* Another cause which may have contributed to this result is *officially* stated in the following extract from the "Report of the Commissioner appointed under the Provisions of the 'Act 5 and 6 Vict. c. 99,' to inquire into the operation of that act, and into the state of the population in the Mining Districts, 1854. Presented to both Houses of Parliament by command of her Majesty," p. 20.

"I believe that the laboring classes generally, in the manufacturing districts of this country, and especially in the iron and coal districts, are very little aware of the extent to which they are often indebted for their being employed at all, to the immense *losses* which their employers voluntarily incur in bad times in order to destroy foreign competition, and to gain and keep possession of foreign markets. Authentic instances are well known of employers having in such times carried on their works at a loss amounting in the aggregate to three or four hundred thousand pounds in the course of as many years. If the efforts of those who encourage the combinations to restrict the amount of labor, and to produce strikes, were to be successful for any length of time, the great accumulations of capital could no longer be made, which enable a few of the most wealthy capitalists to overwhelm all foreign competition in times of great depression, and thus to clear the way for the *whole trade* to step in when prices revive, and to carry on a great business before *foreign* capital can again accumulate to such an extent as to be able to establish a competition in prices with any chance of success. The large capitals of this country are the great instruments of warfare (if the expression may be allowed) against the competing capital of foreign countries, and are *the most essential* instruments now remaining, by which our manufacturing supremacy can be maintained; the

buy scraps in their market, and consequently raise the price, they must either pay that price or use more ore in the form of pig iron from Staffordshire or Scotland, and enhance its price correspondingly.

The effect of such a change in the duty would, therefore, simply be to enable us to import and work those scraps which are now worked in England, and sent here afterwards.

It would thus equalize us to some extent with the English manufacturers in our competition, by increasing *their* cost and diminishing our own. It would, in fact, change our manufacture of rolled iron from a feeble and hazardous business to a vigorous branch of the national production.

I might add, in conclusion, that this proposition ought not to meet with opposition from any source; but should rather obtain the heartiest approval, both in this country and Great Britain: as it is in harmony with what is called "the great principle of free trade," while it gives to our own manufacturers a fairer field for competition.

CHARLES E. SMITH.

PHILADELPHIA, September 29, 1855.

other elements—cheap labor, abundance of raw materials, means of communication, and skilled labor—being rapidly in process of being equalized."

(The Italics are in the original.)

It is scarcely necessary to say that there is no "foreign market" into which English iron is freely admitted, except the United States, which is worth this "immense" sacrifice to obtain control of it, and no other in which the domestic competition is sufficiently great to require it.

